Timing Mode

Power is continuously applied to input voltage terminals. Upon closure of a normally open (N.O.) external initiate switch, the “On” delay time begins. If the switch remains closed for the full time, the load energizes. The load remains energized until the initiate switch is opened, which begins the “Off” delay time. If the switch remains open for the full time, the load de-energizes.

TGCMLB Timers

TGCMLB series Cube Relay timers are a unique combination of RC (resistor-capacitor) timing with a 12 amp relay output in a 2” x 2” configuration without heat sinking.

For users of solid state timers of this type, the TGCMLB provides equal performance with the additional benefits of no leakage in the “Off” state.

FEATURES

- High current-carrying capacity up to 12 amps
- 100% Load isolation
- No leakage in “Off” state
- No heat sinking required
- Available in time delay periods up to 300 seconds
- Insensitive to thermostat anticipator leakage
- Transient protected
- No minimum load required
- Totally encapsulated for protection from harsh environments
- 100% Operational testing before shipping
- RoHS compliance available
**Input Voltage:** VAC: 24, 50/60Hz ±20%

**Time Delay:**
- **Timing Mode:** Dual Function
- **Type:** Analog
- **Time Range:** First delay: Up to 300 seconds  
  Second delay: Up to 300 seconds
- **Time Adjustment:** Factory-fixed time periods

**Repeatability:** ±0.5%

**Setting Accuracy:** Fixed time period: ±20% of nominal time

**Reset/Recycle Time:** 100 milliseconds

**Relay Output Form:** Standard: SPST N.O.  
Optional: SPST N.C., SPDT

**Relay Output Rating:** 12 amps (resistive)

**Relay Life Expectancy:**
- **Mechanical:** 20 million operations  
  **Electrical:** 100,000 operations at maximum load

**Protection:**
- **Transient Protection:** 25 joules
- **Dielectric Strength:** 1800V RMS 60Hz

**Temperature Ranges:**
- **Storage:** -40°C to +85°C
- **Operating:** -25°C to +65°C

**Physical Data:**
- **Mounting:** Surface with one #8 screw
- **Anticipator Resistor:** 3K Ohm minimum

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**Options Selection**

<table>
<thead>
<tr>
<th>Mode of Operation</th>
<th>Series</th>
<th>Input Voltage</th>
<th>Examples of Time Ranges</th>
<th>Time Adjustment Method</th>
<th>Relay Output Form</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dual Function On Delay/Off Delay</strong></td>
<td>TGCMLB</td>
<td>24 VAC</td>
<td>FIXED TIME PERIODS</td>
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<td></td>
<td></td>
<td></td>
<td>0001 = 1.0 sec.</td>
<td>Fixed, internal, factory-set</td>
<td>2 SPST (N.O.)</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>0010 = 10 sec.</td>
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<td>0030 = 30 sec.</td>
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<td>0060 = 60 sec.</td>
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<td>0120 = 120 sec.</td>
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<td>0300 = 300 sec.</td>
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</table>

Any custom range up to 300 seconds.

Time periods for the “On” and “Off” delay should be shown separated by a slash.

**Example:** TGCMLB 3 0010/0010 CC 2

Specifications subject to change without notice.